

# FAKE NEWS IN HEALTH: OUTBREAK 3.0

You may have already heard fake news stories like "papaya cures Parkinson disease," or "the pharmaceutical industry secretly holds a cure for cancer," or even "vaccines can trigger autism."

Even if these fake news stories can sometimes seem anecdotal, they nevertheless represent a real threat to public health, undermine trust in science, and deteriorate the image of the pharmaceutical industry.

The World Health Organization (WHO) Director-General, Tedros Adhanom Ghebreyesus announced on February 15, 2020 in a context of an unprecedented health crisis: "We're not just fighting an epidemic; we're fighting an infodemic. Fake news spreads faster and more easily than this virus and is just as dangerous."<sup>1</sup>

The use of the term "infodemic" reveals the magnitude of the information crisis during a pandemic in the digital era, flooding the Internet and social networks with fake and unproven claims.

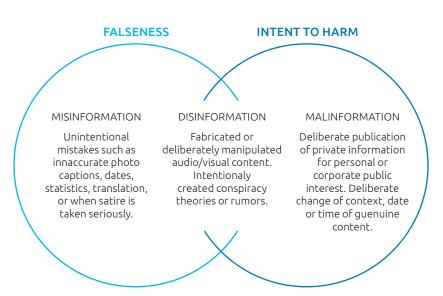
You are all already familiar with the buzzword "fake news," but do you know precisely what a fake news story is? How many of you know it can be dangerous to your health? Let's look at the new challenges raised by outbreak 3.0.



### A COMPLEX AND POLYMORPHIC DEFINITION

The Collins English Dictionary defines fake news as follows: "false, often sensational, information disseminated under the guise of news reporting." But we should understand it in a more holistic manner. Indeed, there is no clear universal consensus on the definition and researchers are still struggling to define a precise terminology.

Claire Wardle (professor at Brown University and expert in social media, user generated content and verification) uses the "information disorder" designation rather than "fake news." Extending from "misinformation" to "malinformation" with varying degrees of "falseness" and "intent to harm," "information disorder" can be illustrated as follows:<sup>2</sup>



#### MIS-, DIS- AND MALINFORMATION

Fake news is nothing new. It is only a contemporary reflection of a concept that has crossed ages under different forms. Back in 1921, Marc Bloch, a French historian, declared the following in Reflections of a historian on the false news of the war: 'False news, in the multiplicity of their forms - simple gossip, impostures, legends - have filled the life of humanity.'

Information has always been a means to gain power, to influence and change behaviors, or to orient the public opinion in a certain way in all areas of the public sphere: politics, economics, and more recently, health.

<sup>&</sup>lt;sup>2</sup> First Draft 2019

### HEALTH AS AN IDEAL BREEDING GROUND FOR FAKE NEWS

Health sits at the core of our lives and we want to make informed choices for our general well-being. But the sheer volume of information online can create a real climate of doubt and confusion for the reader, making it difficult to distinguish truth from fake news. Over the past 20 years, we observed the emergence of the "cybercondria" phenomenon, also known as "digital hypochondria." When learning about their symptoms, users feel anxious and overwhelmed by the information they find online, leading to inaccurate self-diagnoses and hasty, sometimes dangerous self-medication.

A study conducted in England found that the NHS could save nearly £420 million a year if the anxiety generated by cybercondria were treated in the patients concerned.<sup>3</sup>

Fake news in health includes a large spectrum, ranging from unproven health practices to biased or falsified studies. And amongst the most popular and relayed topics, we find:

- Vaccines: "The measles vaccination causes autism."

Vaccination coverage has declined after a fallacious link was made between the measles vaccine and autism through the famous "Wakefield case" in 1998. Vaccination coverage declined in some areas of the UK, with immunization rates dropping from between 92% and 73% to as low as 50%. As a result, measles deaths began rising.<sup>4</sup> Even after being debunked and retracted, this fake news served as a mouthpiece for the anti-vax movements that continue to relay this information years later, jeopardizing vaccine coverage strategies.

- Cancer: "The cancer industry is not looking for a cure; they're too busy making money."

This fake news has generated 5.4 million engagements in 2019 on a website operated by a dietary supplement purveyor posing as "The Health Ranger."<sup>5</sup> The pharmaceutical industry is often blamed and conspiracy theories flourish, pushing patients to turn to gurus promoting natural or "non-chemical" unsubstantiated cures.

- And obviously, Covid-19 related fake news: "COVID-19 spreads though the 5G network."

You have all seen it, Covid-19 fake news has flooded the web, conveying fake messages from the origins of the virus, to means of dissemination, and dangerous and unproven cures. This infodemic worsens the consequences of the epidemic and dangerously blurs the messages of truthful information, sowing uncertainty and fear.

<sup>&</sup>lt;sup>3</sup> Boseley, S. 2017

<sup>&</sup>lt;sup>4</sup> Leem 2021

<sup>&</sup>lt;sup>5</sup> Zadrozny, B. 2019

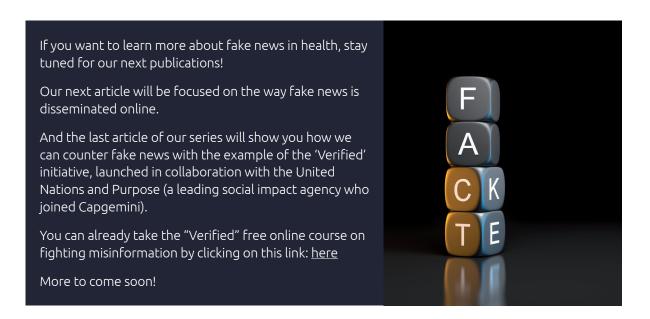
## A SERIOUS THREAT TO PUBLIC HEALTH

As you can well imagine, dangers linked to the circulation of fake news mislead patients and badly affect decision making. They can be classified according to two categories:

RISKS THAT CAN IMMEDIATELY AFFECTS PATIENT'S HEALTH	RISKS THAT AFFECT THE HEALTHCARE ECOSYSTEM MORE GLOBALLY
<ul> <li>Refusal to follow conventional therapeutic schemes and adoption of non-evidence-based alternatives</li> </ul>	<ul> <li>Questioning of therapies or the legitimacy of the scientific community</li> <li>Adoption of behaviors of defiance towards public health authorities or healthcare professionals</li> <li>Acquisition of distorted scientific knowledge in health</li> </ul>
<ul> <li>Aggravation of a pathology and symptoms or appearance and triggering of a new pathology and symptoms</li> </ul>	
<ul> <li>Delay in treatment and a consequent loss of opportunity</li> </ul>	
• Decrease in the effectiveness of certain treatments	
• Appearance of drug interactions	

• Hospitalizations and life-threatening conditions in extreme cases

It is now more vital than ever to curb the phenomenon and put in place measures to massively reinform and restore confidence among citizens.





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